

NORTH PACIFIC OCEAN

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The Aleutian Low showed more than ordinary disintegration for the month in April, 1927. It lay over Bering Sea and the islands southwest of Alaska on only a few days, its activities being mostly confined to the upper and eastern waters of the Gulf of Alaska, this principally during the first 6 and the last 10 days of the month. Its general center, as in March, lay near Kodiak. West of the Peninsula of Alaska pressure on the average was much above normal, and during most of the month an anticyclone was situated over Bering Sea.

The North Pacific HIGH was composed, generally speaking, of two parts, one lying off the coast of California, the other in middle latitudes west of the one hundred and sixtieth meridian of west longitude. Between the two a few intruding shallow LOWs caused brisk winds, which at times rose to force 8, over the western part of the California-Hawaiian routes on the 15th, 17th, 24th, and 25th.

The pressure conditions at various island and coast stations in west longitudes are shown in the following table:

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean, April, 1927

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Dutch Harbor ^{1 4}	30.04	+0.21	30.46	3d.....	29.00	8th.
St. Paul ^{1 4}	30.17	+0.37	30.68	2d.....	29.18	8th.
Kodiak ^{1 4}	29.78	-0.62	30.36	17th.....	29.36	23d. ⁵
Midway Island ^{1 4}	30.04	-0.09	30.24	23d.....	29.62	5th.
Honolulu ²	30.01	-0.06	30.11	29th.....	29.88	10th.
Juneau ²	29.88	-0.08	30.10	18th.....	29.45	27th.
Tatoosh Island ^{2 3}	30.02	-0.62	30.49	20th.....	29.51	6th.
San Francisco ^{2 3}	30.03	-0.01	30.19	4th.....	29.83	16th.
San Diego ^{2 3}	30.00	+0.04	30.16	1st.....	29.88	17th.

¹ P. m. observation only.

² A. m. and p. m. observations.

³ Corrected to 24-hour mean.

⁴ For 29 days.

⁵ On other date.

Owing to the position of the Hawaiian Islands with reference to the western part of the anticyclone already referred to, the northeast trades prevailed with unusual steadiness at Honolulu. The maximum wind velocity at this station was 35 miles an hour from the northeast on the 13th; the average hourly velocity was 9.7 miles.

Exceptionally cool weather for the season occurred off the lower coast of Alaska. At Juneau this was the coldest April on record, the average temperature being 34°, which is 1° lower than that of the previous low record in 1890 and 7° below the normal.

Unsettled weather prevailed in middle and upper Asiatic waters owing to the rapid succession of high and low pressure areas, incident to the time of year, which came from the continent. No severe storms occurred off these coasts, but on several dates there were fresh gales south and east of Japan, accompanying eastward-moving depressions which skirted the islands. There were no disturbances of a tropical nature in the Far East this month.

April is not ordinarily a very stormy month on the North Pacific, but there were fewer gales than usual on the ocean this year. These few occurred largely in middle and higher latitudes along the western reaches of the sailing routes between America and Asia, and were mostly of forces 8 or 9. On the 1st, 6th, 7th, and 22d gales attained the maximum force of 10 for the month. The whole gales of the 1st and 7th were experienced by steamers near longitude 176° E., latitudes 48° and 44°, respectively. Early in April some moderate to fresh gales occurred off the Washington coast, among them being a whole gale of short duration—a 61-mile wind from the southwest—recorded by the Weather Bureau station at Tatoosh Island on the 6th. The gale of the 22d was experienced in the lower part of the Gulf of Tehautepec. It was easterly in direction, but was really a deflected norther occasioned by the strong southward extension of a high from the United States. The American steamship *Tuscaloosa City*, which encountered it, reported quickly freshening winds upon entering the gulf on the 21st, and as rapidly moderating winds upon leaving it on the 23d.

Fog in April showed a decided increase over that of March along the upper sailing routes between the eastern Aleutians and Japan, and a slight increase thence southward to the thirtieth parallel, it being observed daily somewhere within this range. South of the central Aleutians it occurred principally during the first decade and west of the one hundred and eightieth meridian during the last decade. Between 160° and 130° west longitude fog was less frequent than in March and was reported on only a few days over the entire area, mostly within two or three degrees north and south of the fiftieth parallel. Along the American coast it was fairly frequent, especially between the forty-fifth and twentieth parallels.